

## ABSTRACT

A lithographic projection apparatus includes a support configured to support a patterning device, the patterning device configured to pattern the projection beam according to a desired pattern. The apparatus has a substrate table configured to hold a substrate, a projection system configured to project the patterned beam onto a target portion of the substrate. The apparatus also has a purge gas supply system configured to provide a purge gas near a surface of a component of the lithographic projection apparatus. The purge gas supply system includes a purge gas mixture generator configured to generate a purge gas mixture which includes at least one purging gas and a moisture. The purge gas mixture generator has a moisturizer configured to add the moisture to the purge gas and a purge gas mixture outlet connected to the purge gas mixture generator configured to supply the purge gas mixture near the surface.